ABSTRACT

Virus displayed peptides or proteins can be integrated and presented in a nucleic acid array format. The present invention makes it possible to generate naked nucleic acidvirion protein display complexes in which the individual nucleic acid template is freely and covalently linked to the very same virion proteins it coded for. This cis-capture of the virion proteins by its naked nucleic acid template makes it possible to use phage display libraries in combinatorial display array formats. This can be achieved by allowing the naked nucleic acid-virion protein display complexes to be deposited by nucleic acid hybridisation to their corresponding mRNA or cDNA which separately have been prepared and used for the fabrication of a nucleic acid array. The hybridisation step will therefore function as a 'search engine' and a `delivery robot' by automatically positioning the protein to its own gene. The nucleic acid coded protein or peptide display arrays described here can be used in functional genomics, protenomics and in protein or peptide identfication of relevance for the exploration of therapeutic drugs as well as for search of new diagnostic procedures.